Idaho Grade 9

# LineUp With Math<sup>TM</sup> Alignment Idaho Achievement Standards Mathematics 2-1-06

control.

#### **Standard 1: Number and Operation**

#### Goal 1.1: Understand and use numbers.

### Objective(s)

**9.M.1.1.2** Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation including application in real world situations. (347.01.a)

#### LineUp With Math<sup>™</sup> Activities

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

#### Standard 2: Concepts and Principles of Measurement

#### Goal 2.2: Apply the concepts of rates, ratios, and proportions.

# Objective(s) LineUp With Math<sup>TM</sup> Activities

# **9.M.2.2.1** Use rates, ratios, proportions, and map scales in problem-solving situations. (349.03.a)

#### --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic

- **9.M.2.2.2** Apply concepts of rates and direct and indirect measurements.
- --Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

#### Goal 2.3 Apply dimensional analysis.

#### Objective(s)

**9.M.2.3.1** Use customary and metric units and their relationship to one another and to real world applications involving length, area, capacity, weight, time and temperature. (349.04.a)

# LineUp With Math<sup>™</sup> Activities

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

## Goal 2.4 Apply appropriate techniques and tools to determine measurements.

#### Objective(s)

## LineUp With Math<sup>TM</sup> Activities

**9.M.2.4.1** Determine and use appropriate units. (349.01.a)

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

# Standard 5: Data Analysis, Probability, and Statistics

#### Goal 5.5: Make predictions or decisions based on data.

#### Objective(s)

**9.M.5.5.2** Use appropriate tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data. (352.05.a)

# LineUp With Math<sup>™</sup> Activities

- --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
- --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.